

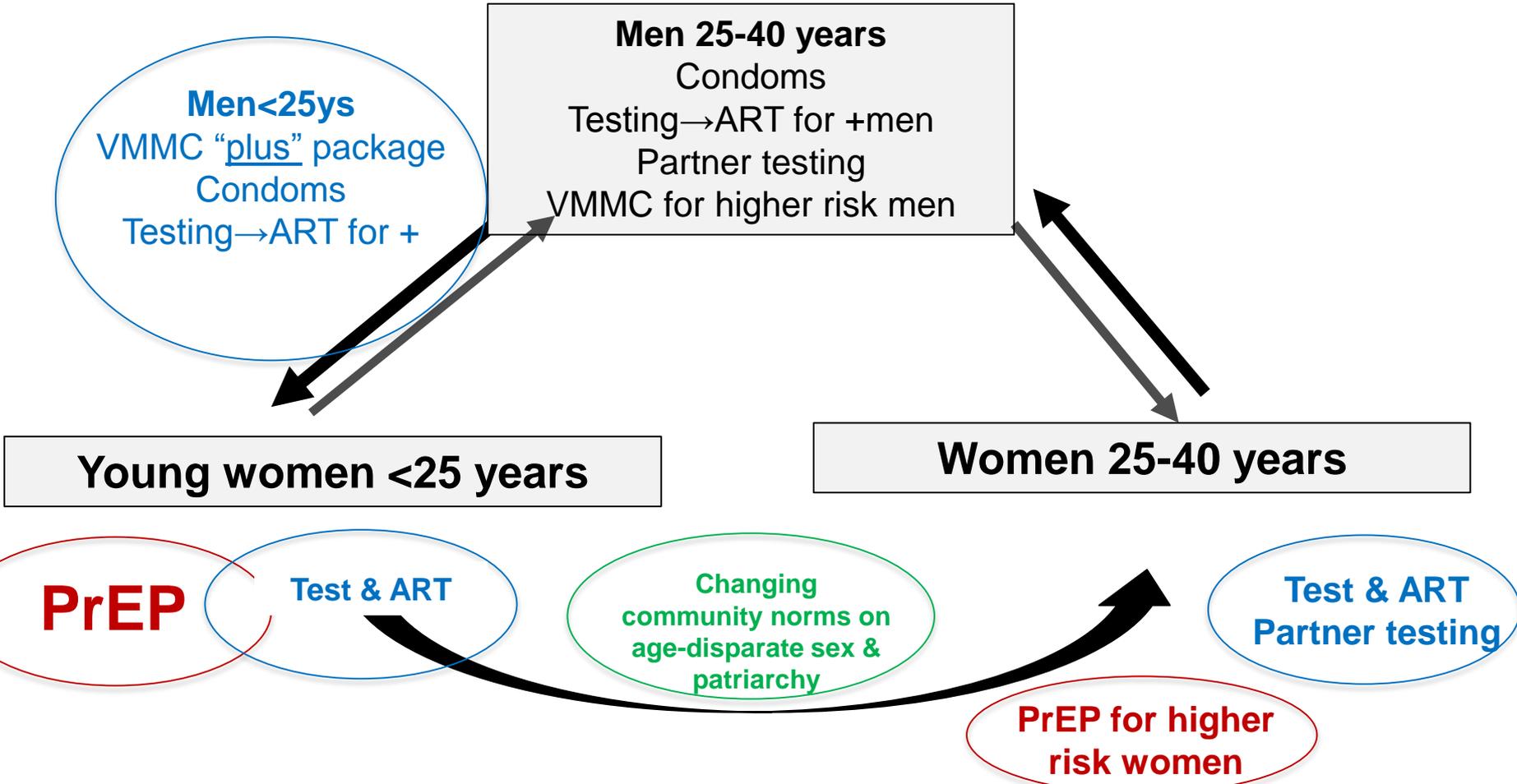
# The Evidence Base for Women



**Dr. Busisiwe Msimanga-Radebe**  
**WHO South Africa country office**

**ICASA 2017**  
**Abidjan, Cote d'Ivoire**

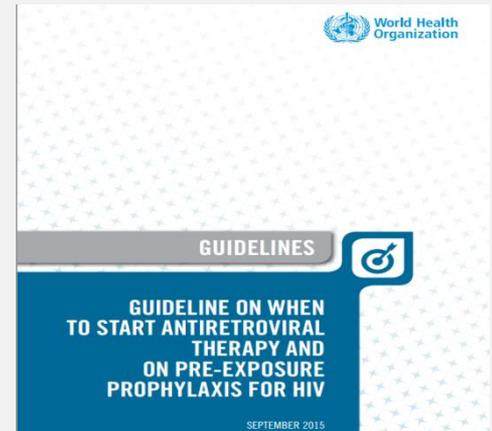
# Combination prevention to break the cycle of HIV transmission



# WHO recommendation for PrEP

Oral PrEP (containing TDF) should be offered as an additional prevention choice for people at *substantial risk* of HIV infection as part of combination prevention approaches

- **Enabling recommendation**
- **Not population specific**
  - For people **at substantial HIV risk** (provisionally defined as HIV incidence > 3 per 100 person–years in the absence of PrEP)
- Offer as an **additional prevention choice**
- Provide PrEP within **combination prevention**
  - Condoms and lube
  - Harm reduction
  - HIV testing and links to ART
- Provide PrEP with **comprehensive support**
  - Adherence counselling
  - Legal and social support
  - Mental health and emotional support
  - Contraception and reproductive health services



# WHO PrEP Implementation Tool (2017)



- Modular
- Different audiences
- Different setting
- Different populations
- Suggestions not recommendations
- Much uncertainty
- Learn as implement
- Frequent updating anticipated

<http://who.int/hiv/pub/prep/prep-implementation-tool>

# Recurrent concerns expressed by MoH

**Cost**



Why should we prioritize PrEP when treatment is our immediate priority?

**Where, Who**



Where do we start? Which populations ? Where to offer services?

**Safety**



'Toxic drugs' for people without HIV

**Drug resistance**



People taking PrEP, esp. with poor adherence: Will this result in lots of drug resistance ?

**Behavioral disinhibition**



Offering PrEP will mean people stop using condoms, have more sexual partners, more STIs

**Pregnancy and hormonal  
contraception**



PrEP isn't safe during pregnancy and should be stopped when women become pregnant  
What about drug interactions?

**Adherence**



Lots of the trials had poor results with poor adherence

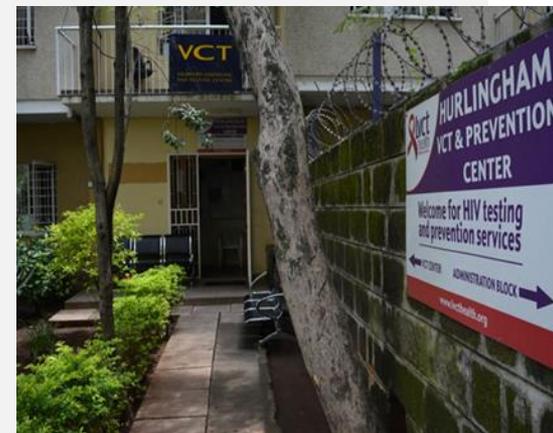
**< 18 years**



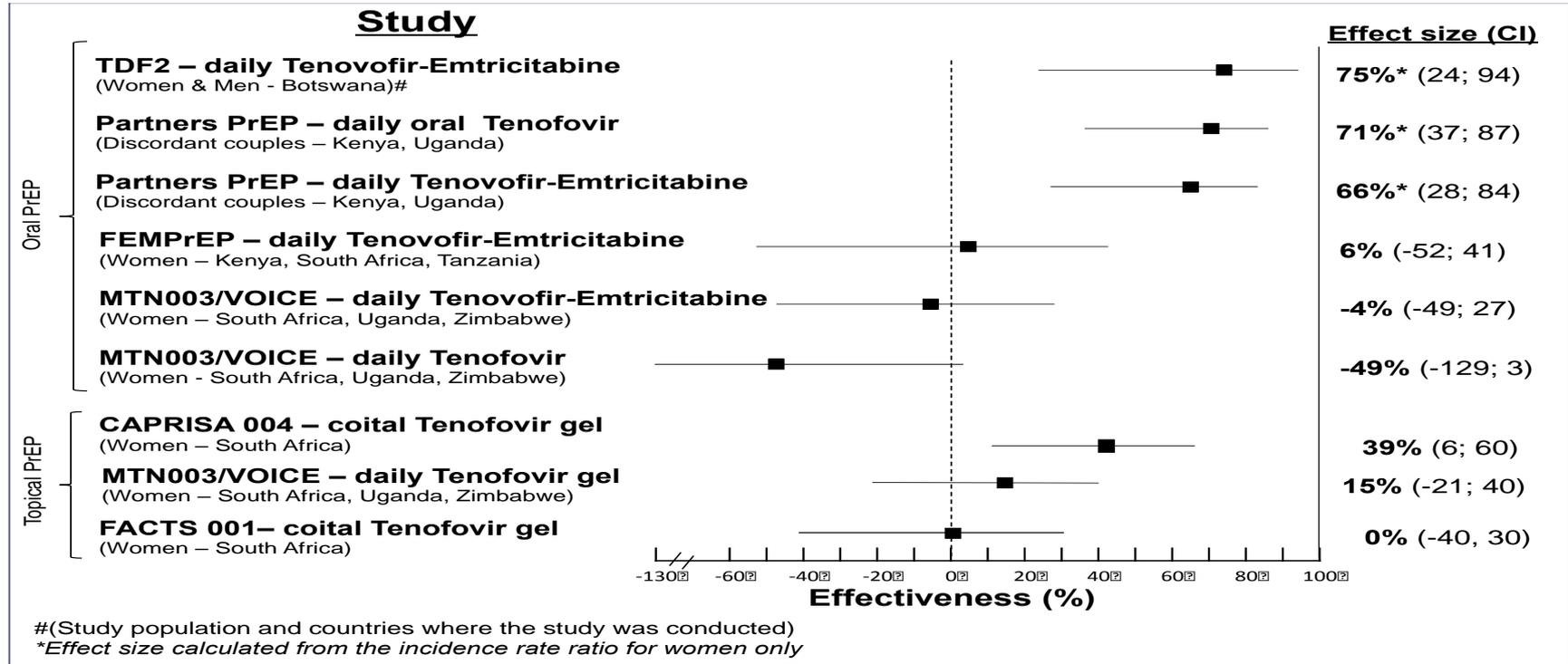
Many concerns esp. for adolescent girls e.g. safety, feasibility, adherence, perception of risk, parental consent

# PrEP and women – key issues

- **Mixed "results" from trials**
- **Very little real world experience for women**
  - Even less for adolescent girls
  - More (and increasing experience from sex worker projects)
- **How to prioritize implementation**
  - All women – overwhelming and unfeasible
  - Women at highest risk – often have multiple vulnerabilities
  - Women who want PrEP – may have self-identified high risk and more motivated to adhere
  - Balance between offering PrEP to women at substantial risk vs stigmatizing PrEP as something for 'risky women'
- **Adherence is key**
  - Good adherence in SDC trials and OLE
  - Poor adherence – commonly observed in other trials, esp younger women
  - Understanding poor adherence
  - Supporting better adherence
- **Where to offer PrEP for women**
  - ANC clinics, Family planning, STI services, Primary health care, ART clinics



# Effectiveness of TDF and TDF/FTC antiretroviral pills & gels in women



**Varying outcomes from PrEP trials - attributed to adherence**

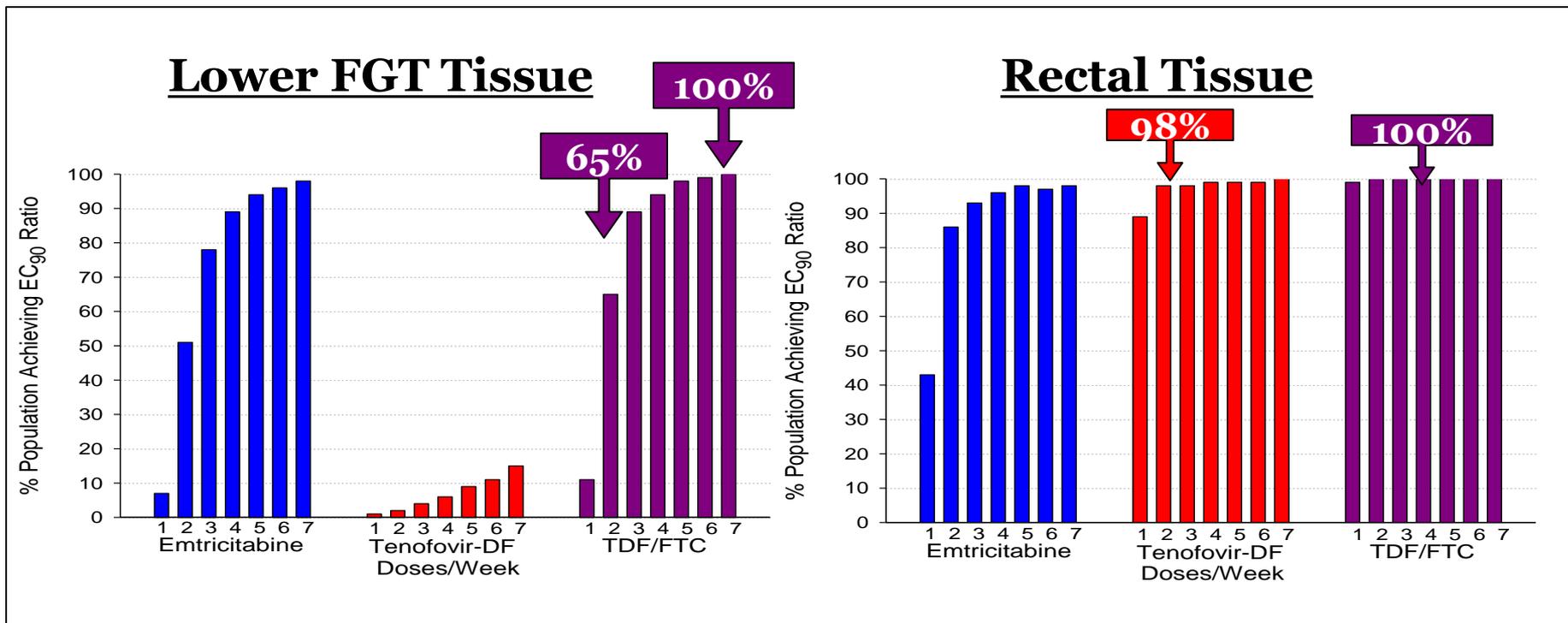
# PrEP 'less forgiving' for women compare to MSM

**Message: PrEP reaches effective steady state levels effectiveness after approximately 7 doses.**

- *Protection likely to be adequate after **7 daily doses for women having vaginal sex** (PK studies from vaginal tissue)*
- *Protected likely to be adequate after **7 daily doses for men having penile-vaginal sex** (very limited PK data from penile tissue) men*
- *Protected likely to be adequate after **<daily doses for anal sex** (PK studies from rectal tissue)*

**Event driven PrEP** (eg Ipergay regime) shown from RCT to be effective for MSM – no studies for women – but unlikely to give adequate protection

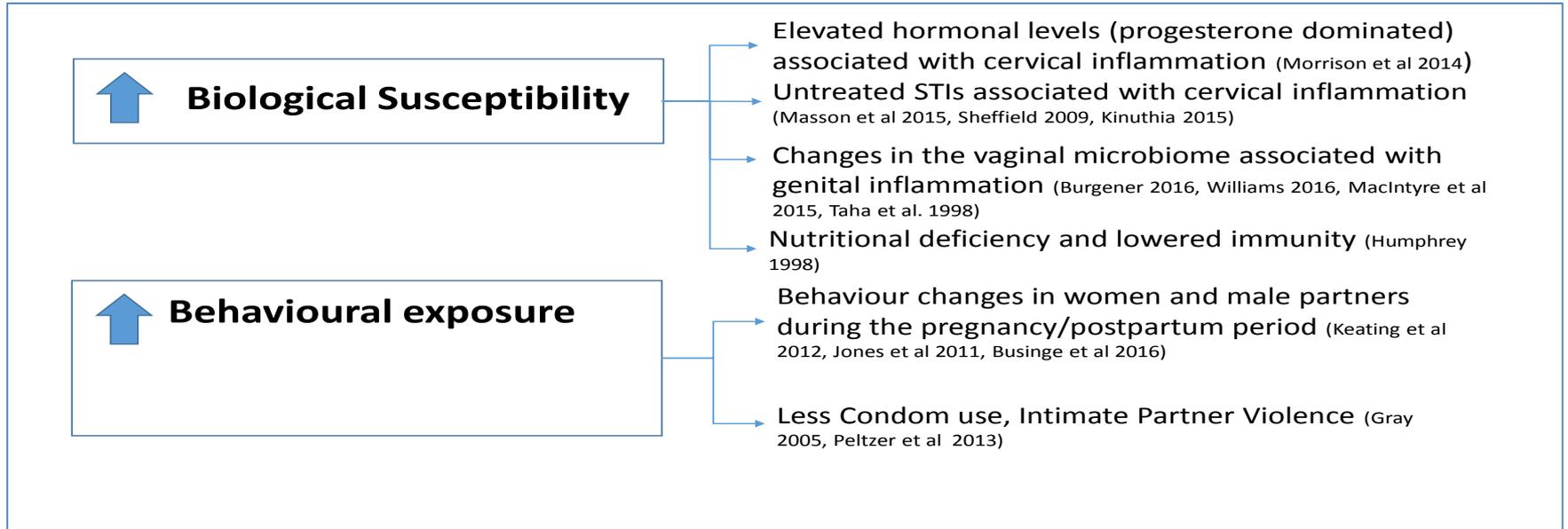
# “Time to effectiveness” in lower female genital tract (FGT) vs rectal tissue



# Multiple ongoing PrEP studies in young African women, including

Study, funder, PIs	N & locations	What it will teach us
<b>HPTN 082/HERS</b> (NIH) Pis: Celum, Delaney-Moretlwe	400 women ages 16-25 <b>(Harare, Joburg, &amp; Cape Town)</b>	<ul style="list-style-type: none"><li>• Uptake;</li><li>• Adherence with CBT counseling &amp; 2 way SMS;</li><li>• Effect of drug level feedback on adherence</li></ul>
<b>3Ps</b> (NIH & BMGF) Pis: Bekker, Celum	200 women ages 16-25 <b>(Cape Town)</b>	<ul style="list-style-type: none"><li>• Uptake with creative marketing campaign;</li><li>• Effect of incentives conditioned on drug levels on adherence</li></ul>
<b>POWER</b> (USAID) Pis: Baeten, Celum	3000 women ages 16-25 <b>(Cape Town, Joburg, Kisumu)</b>	<ul style="list-style-type: none"><li>• Emphasis on scalable delivery models</li><li>• Use of a decision support tool</li></ul>
<b>MTN 034 /REACH</b> Pis: Nair, Ngure, Celum	300 women ages 16-21 <b>(Cape Town, Durban, Joburg, Harare, Kisumu)</b>	<ul style="list-style-type: none"><li>• Cross-over study to evaluate safety of oral TDF/FTC PrEP &amp; dapivirine ring</li><li>• Adherence</li><li>• Preference of oral PrEP vs dapivirine ring</li></ul>

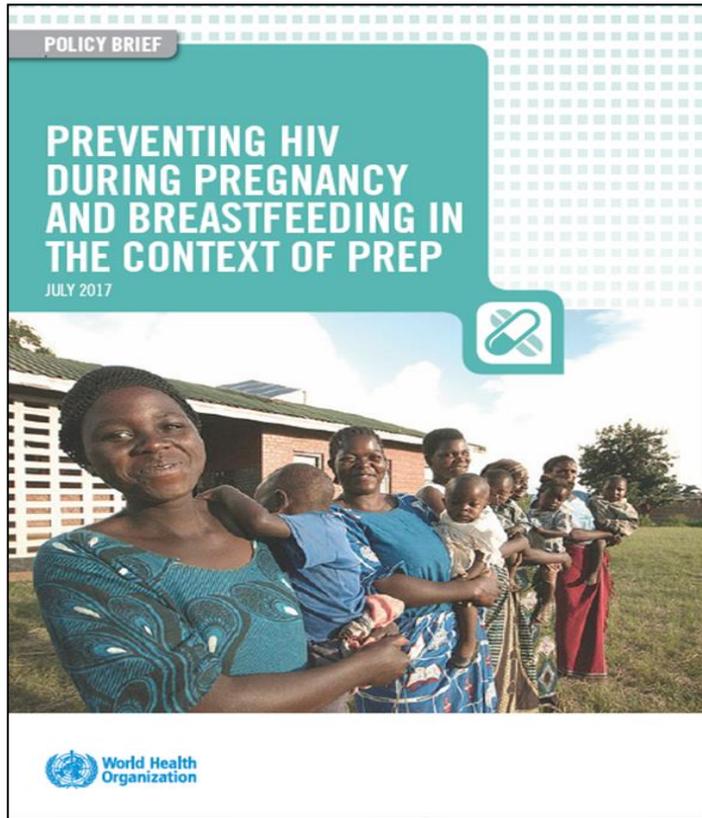
# PrEP in Pregnancy and BF: The rationale



- In some countries, PrEP discontinued when women at substantial HIV risk become pregnant
- HIV acquired during pregnancy/BF can be transmitted to infant
- In high prevalence settings, women at substantial HIV risk **wishing to conceive** may include those whose partners have HIV but are not virally suppressed, or whose status is unknown

# WHO Technical Brief:

## Preventing HIV during pregnancy and breastfeeding in the context of PrEP



- Given the available safety data, there does not appear to be a safety-related rationale for discontinuing PrEP during pregnancy and breastfeeding for HIV-uninfected women receiving PrEP who become pregnant and remain at continuing risk of HIV acquisition.
- In such situations, the risk of HIV acquisition and accompanying increased risk of mother-to-child HIV transmission appears to far outweigh the potential risk of fetal and infant exposure to TDF used for PrEP.
- The final decision on whether to continue PrEP during pregnancy and breastfeeding should be made **by the pregnant woman** in consultation with her health care worker, balancing risks on HIV acquisition against potential harms
- **Additional surveillance** is important

# IMPAACT 2009 (DAIDS ID 30020)

## Feasibility, acceptability and safety of oral PrEP during pregnancy and breastfeeding in AGYW (16-24 years)

International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Network

### Observational cohort study of HIV-uninfected pregnant AGYW designed to

- characterize *adherence* over time among AGYW who initiate once daily PrEP during pregnancy & continue for 6 months following delivery
- compare pregnancy outcomes among women who take PrEP and women who decline PrEP during the AN period.
- Study sites in Zimbabwe, South Africa, Malawi, Uganda



## PRE-EXPOSURE PROPHYLAXIS (PrEP)



### Thanks to

Rachel Baggaley, Michelle Rodolph, Megan Dunbar, Kristine Torjesen, Hasina Subedar, Ioannis Mameletzis, Shaffiq Essajee, Daya Moodley, Lynne Mofenson, Connie Celum, Peter Godfrey-Faussett, Rosalind Coleman, and the WHO PrEP advisory group